

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006534**Date Inspected:** 13-Apr-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** ZPMC and ABF**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS tower**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance(QA) Inspector, Wai Pau, was present during the times noted above for observations relative to the work being performed.

**Bay #10 South and North Tower Shop**

South Tower Lift #1:-Caltrans QA Inspector observed two welder performed FCAW repair process on outer corner longitudinal seam weld that connected skin plate A and E. The repair weld area located at elevation 43m to 40.7m diaphragm section. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

South Tower Lift #2:-Caltrans QA Inspector observed five ZPMC workers performed grinding process on the fig lug welds and diaphragm welds. The fig lug welds and diaphragm welds are located at elevation 53m to 80.75m interior diaphragm of skin C and D. The grinding processes are removing and repair the fillet welds that have been rejected by VT inspection. Base on Caltrans observation, no discrepancies were noted.

South Tower Lift #1:-Caltrans QA Inspector observed seven ZPMC workers performed grinding process on the fillet welds of corner diagonal stiffener. The fillet welds are located at elevation 9mm to 40.7m and attached to skin plate C and D. The grinding process is removing the weld profiles prior VT and MT inspection. Base on Caltrans observation, no discrepancies were noted.

**Bay #11 East and West Tower Shop**

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## WELDING INSPECTION REPORT

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East Tower Lift#1:- Caltrans QA Inspector observed seven welders performed FCAW process on PJP weld for corner diagonal stiffener that connected skin plate C to D and B to C. The welding located at elevation 9m to 47.6m diaphragm. The minimum preheat and maximum interpass temperature requirements for FCAW PJP weld are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

East Tower Lift #2:-Caltrans QA Inspector observed four ZPMC workers performed grinding process on the fig lug welds and diaphragm welds. The fig lug welds and diaphragm welds are located at elevation 53m to 80.75m interior diaphragm of skin C. The grinding process is removing the weld profiles that have been rejected by VT inspection. Base on Caltrans observation, no discrepancies were noted.

West Tower Lift #2:- Caltrans QA Inspector observed three ZPMC welders in process SMAW welding on inner corner longitudinal seam welds that connected skin plate C to D and D to E. The inner corner longitudinal seam welds will fill up to 30% to secure the skin plate prior the tower relocation. The SMAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

As noted within the report above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 13482570045, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Pau, Wai	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford, William	QA Reviewer

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